

**REMARKS**

Claims 1-18 are pending in this application. By this Amendment, claims 1-13, 17 and 18 are amended to correct grammatical and typographical errors. The specification is also amended to include additional subject matter of the invention.

No new matter is added by this Amendment. The added subject matter to the specification has support in U.S. Appln. No. 09/714,994 filed November 20, 2000, which is now U.S. Patent No. 6,621,554. The present application is a divisional of U.S. Appln. No. 09/714,994 and claims priority therefrom. The entire description of U.S. Appln. No. 09/714,994 was incorporated by reference in the present application (see page 1 of the Application Transmittal), and thus incorporation of the paragraph is not new matter.

Applicants appreciate the courtesy shown to Applicants' representative by Examiner Kim in the June 30, 2004 interview. Applicants' separate record of the substance of the interview is incorporated into the following remarks.

In view of the foregoing amendments and the following remarks, reconsideration of this application is respectfully requested.

**I. Rejection Under 35 U.S.C. §112, first paragraph**

Claims 4, 5 and 9-18 were rejected under 35 U.S.C. §112, first paragraph as allegedly failing to comply with the written description requirement. This rejection is respectfully traversed.

According to the Patent Office, the phrase "electroreprographic module" in claims 9 and 13 is not disclosed in the written description. The phrase "electroreprographic module" is a term of art and is defined, for example, in U.S. Patent No. 6,560,436 and U.S. Patent No. 5,513,282. The phrase "electroreprographic module" has been added to page 5, line 11. Support for the phrase "electroreprographic module" is found in original claims 9 and 13 and thus no new matter is added.

According to the Patent Office, the phrase "the signs of the duplex your element" in claim 5 and the phrase "eight low level of turbulence " in claim 11 and are not disclosed in the written description. The phrase "the signs of the duplex your element" in claim 5 has been replaced with the phrase "a size of entry of the air deflector element." Support for this claim limitation is found, for example, in original claim 18. The phrase "eight low level of turbulence " in claim 11 has been replaced with the phrase "air entering the housing is deflected to minimize turbulent air flow." Support for this claim limitation is found, for example, in original claim 13.

According to the Patent Office, the phrase "adjustable deflector element" in claim 12 is not disclosed in the written description. Support for the phrase "adjustable deflector element" is found, for example, in the subject matter added by this Amendment to page 11, line 12 of the specification.

According to the Patent Office, the use of the air diffuser controlling air through a combination of size of entry, angle of incidence, and speed in claims 4 and 18 is not disclosed. Support for this limitation is found, for example, in the subject matter added on page 11, line 12 of the specification.

Applicant submits that the amended claims are supported by the written description in accordance with the requirements of 35 U.S.C. §112, first paragraph.

For the foregoing reasons, reconsideration and withdrawal of this rejection are respectfully requested.

**II. Rejection Under 35 U.S.C. §102(e)**

Claims 1-3, 5-7, 9, 13 and 18 were rejected under 35 U.S.C. §102(e) as allegedly being anticipated by U.S. Pub. No. 2002/0057921 (Ihara). This rejection is respectfully traversed.

Ihara describes an image forming apparatus constructed so that an air current is formed toward the circumference of the photosensitive drum. The air current is formed by a mechanism comprising an air fan, an air duct, and preferably a guiding member.

Ihara is directed to preventing a photosensitive drum from being degraded by ozone. Ihara discloses that when air flows into the area surrounding the photosensitive drum, and the air is further diffused into a housing from the area surrounding the photosensitive drum, to flow out of the housing, the ozone or the nitrogen oxide does not stay in the area surrounding the photosensitive drum. See paragraphs [0009]-[0011] of Ihara.

In order to provide the above described air flow, Ihara provides the copying machine with an air fan 11 for producing an air current and an air duct 12 for leading the air current from the air fan 11 to the image forming unit 5. See paragraph [0022] of Ihara.

Ihara further describes a rib 10g provided between the fixing unit 7 and the light irradiating unit 4, and provided close by, above and on the right side of the opening 55a. See paragraph [0031]. Ihara describes in paragraph [0047], that when the rib 10g serving as an air guiding member is provided, the air current can be reliably guided to the opening 55a. Accordingly, the concentration of the ozone or the like can be efficiently decreased, thereby making it possible to more reliably prevent the photosensitive drum 51 from being degraded.

Ihara neither describes nor suggests an air deflector element located in the housing and including an element located in the housing oriented to deflect air entering the housing away from at least one development station. Rather, Ihara describes internally generating air flow and guiding that air flow within the housing to decrease the concentration of ozone. Nowhere does Ihara describe or suggest deflecting air that is entering the housing. Moreover, Ihara teaches away from the present invention by generating air flow within the housing and further guiding that air flow throughout the housing.

For at least the foregoing reasons, Ihara fails to describe or suggest each and every feature of claims 1, 9 and 13. Thus, Ihara fails to anticipate claims 1, 9 and 13 or claims depending therefrom.

Reconsideration and withdrawal of this rejection are respectfully requested.

**III. Rejection Under 35 U.S.C. §102(b)**

Claims 1-7, 9-14 and 18 were rejected under 35 U.S.C. §102(b) as allegedly being anticipated by U.S. Patent No. 5,689,766 (Hollar). This rejection is also respectfully traversed.

According to Hollar, it is advantageous to isolate the marking components from airborne contaminants and ambient temperature conditions. Hollar describes an enclosed, pressurized module that allows for the control of heat and contaminants to a greater degree than open ambient air systems. The pressurized module makes possible the introduction of an air conditioned environment to enable the cooling of marking components which is critical to component life and toner performance.

Hollar, as in Ihara discussed above, is directed to providing internal air flow within the enclosed housing and to the controlling of air flow throughout the enclosed housing. This reduces hot spots created by component heat losses and toner disturbances. See col. 5, lines 21-26. Hollar describes in col. 4, lines 39-49 that diffusers 78 are positioned inside or through enclosure 12 and adjacent to those areas of photoreceptor 26 which are susceptible to heat and particle contamination generated by other components. The diffusers 78 are connected to an air duct 82 which is further connected to air input conduit 20. Air entering the diffusers 78 is regulated by companion air valves 76. The air valves perform the function of a damper. Air valves 76 are rotatable so as to vary the flow of air through diffusers 78 for distribution to hot spots or accumulations of particulate matter.

Hollar neither describes nor suggests an air deflector element located in the housing and including an element located in the housing oriented to deflect air entering the housing away from at least one development station. Rather, Hollar describes introducing air through the air input conduit 20 into the housing, whereby the air is further directed by air ducts and air valves to various areas with high temperatures or particulate accumulation. In fact, to remove the particulate accumulation, Hollar describes varying the air flow through apertures for direct distribution of air onto the particulate accumulation in order to disperse the particulate matter. Nowhere does Hollar describe or suggest deflecting air that is entering the housing. As in Ihara discussed above, Hollar teaches away from the present invention by supplying the housing with air and directing the air flow to control ambient temperature conditions and particulate accumulation.

For at least the foregoing reasons, Hollar fails to describe or suggest each and every feature of claims 1, 9 and 13. Thus, Hollar fails to anticipate claims 1, 9 and 13 or claims depending therefrom.

#### **IV. Rejection Under 35 U.S.C. §103(a)**

Claims 8 and 15-17 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Hollar in view of U.S. Patent No. 4,583,112 (Morano). This rejection also is respectfully traversed.

As described above, Hollar fails to describe or suggest the recited elements of claims 1 and 13. The Patent Office has relied on Morano for allegedly teaching a flap attached to the top wall of the housing to deflect air. However, even if Hollar were combined with Morano as alleged by the Patent Office, the present invention still would not have been achieved because Morano does not remedy the deficiencies of Hollar as described above.

For the foregoing reasons, reconsideration and withdrawal of this rejection are thus respectfully requested.

**V. Conclusion**

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1-18 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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Date: July 2, 2004

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